Audrey has worked with pre-service teachers since 2007 and has worked at Curtin University since 2008, teaching in all modes of delivery. Initially teaching in many areas of the curriculum, she joined the mathematics education team and found colleagues who shared her passion for mathematics education. As part of that team, Audrey worked on developing, writing, coordinating, and teaching units that focus on mathematics education. Her aim has always been to incorporate experiences and activities designed to provide opportunities that may help change how pre-service teachers see and experience mathematics. Her work in the unit is informed by four years of research in the area, particularly on ways to measure disposition towards mathematics. She also works on promoting and incorporating an extended interpretation of numeracy – one which reflects both Ananiadou and Claro’s (2009) belief that competence involves the application of skills and the “personal confidence, comfort and willingness to ‘have-a-go’” (Australian Association of Mathematics Teachers [AAMT], 1997, p. 14).

**Specialty areas of teaching**

- Approaches that enhance student competence and confidence
- Overcoming conceptual change in STEM disciplines

**Description of teaching to showcase to others**

We all probably have a teacher who had a great impact on us. Hopefully, most of us remember a teacher who had a positive influence, who encouraged us to have a go, take a chance, or push ourselves to our best. In mathematics education, the focus is on numeracy of pre-service teachers. Pre-service teacher numeracy needs careful consideration as it should incorporate more than mathematics skills or mathematical competency. Numeracy also involves disposition towards mathematics—a consideration of the attitudes, confidence and mathematics anxiety; that is, the level of willingness to use mathematics skills and to develop mathematical competency. This approach focuses the description of numeracy provided by Australian Association of Mathematics Teachers (AAMT, 1997) – “personal confidence, comfort and willingness to ‘have-a-go’” (p. 14). That is, as well as a personal understanding of mathematics, pre-service teachers need to be willing to use their understanding of mathematics. However, pre-service teachers may suffer from mathematics anxiety, a lack of confidence in mathematics, or negative attitudes towards mathematics – all of which may have developed over years from their experiences of mathematics in their formal schooling. If these experiences go unchallenged, they may interfere with pre-service teacher use of mathematics and their creation of mathematics learning experiences for their future students. As part of an emphasis on developing pre-service teacher numeracy – their mathematical skills, mathematical competence, and willingness to have a go – this unit focuses on encouraging pre-service teachers to revision how they view mathematics and their personal numeracy. Our students are given tools with which they can investigate their competence, attitudes towards,
confidence with, and anxiety regarding mathematics as well as new opportunities that enable them to focus on their numeracy, particularly their willingness to engage in mathematical activities.

Open Door availability

Unit: The Numerate Educator 141
Times Available: Monday 8-10am
Dates Available:
20 or 27 October 2014
3 November 2014
Location of Session: Bldg 300.Rm 220
Available for consultation: Directly after this session and can also be negotiated

Unit: The Numerate Educator 141
Times Available: Wednesday 10-12noon
Dates Available:
22 or 29 October 2014
5 November 2014
Location of Session: Bldg 201.Rm 707
Available for consultation: Directly after this session and can also be negotiated

Unit: The Numerate Educator 141
Times Available: Thursday 10-12 noon
Dates Available:
23 or 30 October 2014
6 November 2014
Location of Session: Bldg 300.Rm 219
Available for consultation: Directly after this session and can also be negotiated

Unit: The Numerate Educator 141
Times Available: Friday 8-10am & 2-4pm
Dates Available:
24 or 31 October 2014
7 November 2014
Location of Session: Bldg 216.Rm 202
Available for consultation: Directly after this session and can also be negotiated

Learn more about Audrey’s research interests and publications at:

Please contact Name at Audrey/Cooke@curtin.edu.au to request an Open Door session